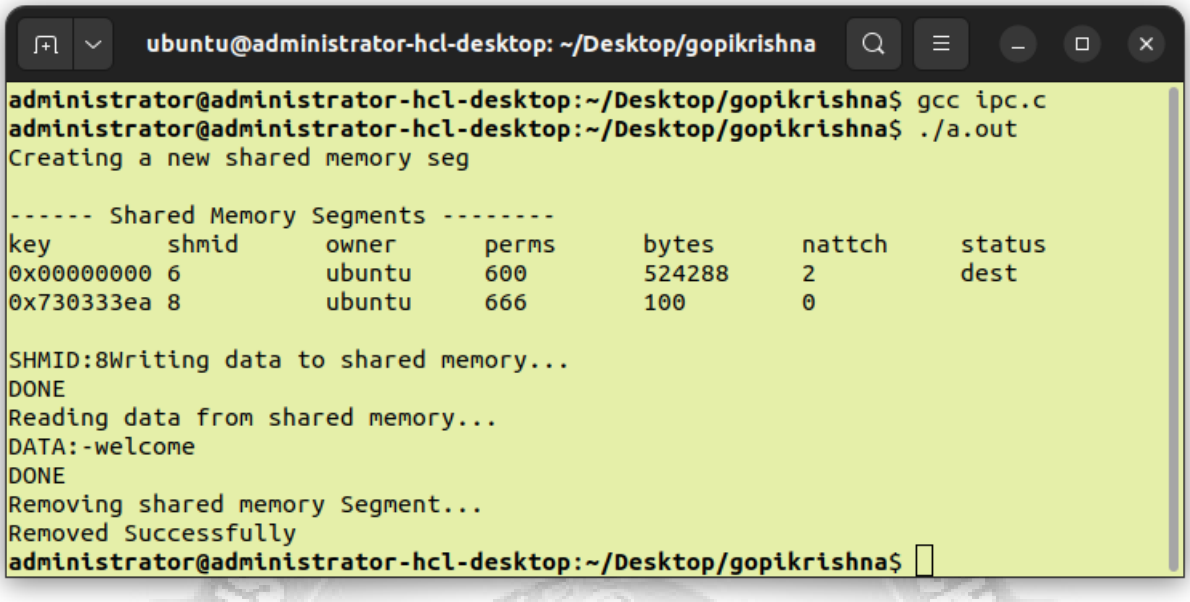
PROGRAM CODE

```
#include<stdio.h>
#include<stdlib.h>
#include<unistd.h>
#include<string.h>
#include<sys/ipc.h>
#include<sys/shm.h>
#include<sys/types.h>
#define SEGSIZE 100

int main (int argc, char *argv[])
{
 int shmid, cntr;
 key_t key;
 char *segptr;
 char buff[] = "welcome";
 key = ftok (".", 's');
 if ((shmid = shmget (key, SEGSIZE, IPC_CREAT | IPC_EXCL | 0666)) == -1)
   {
    if ((shmid = shmget (key, SEGSIZE, 0)) == -1)
          {
           perror ("shmget");
           exit (1);
          }
   }
 else
   {
    printf ("Creating a new shared memory seg \n");
    printf ("SHMID:%d", shmid);
   }
 system ("ipcs -m");
 if ((segptr = (char *) shmat (shmid, 0, 0)) == (char *) -1)
   {
    perror ("shmat");
    exit (1);
   }
 printf ("Writing data to shared memory...\n");
 strcpy (segptr, buff);
 printf ("DONE\n");
 printf ("Reading data from shared memory...\n");
 printf ("DATA:-%s\n", segptr);

 printf ("DONE\n");
 printf ("Removing shared memory Segment...\n");
 if (shmctl (shmid, IPC_RMID, 0) == -1)
   printf ("Can't Remove Shared memory Segment...\n");
 else
   printf ("Removed Successfully\n");
}
```

OUTPUT


ubuntu@administrator-hcl-desktop: ~/Desktop/gopikrishna
administrator@administrator-hcl-desktop:~/Desktop/gopikrishna$ gcc ipc.c
administrator@administrator-hcl-desktop:~/Desktop/gopikrishna$ ./a.out
Creating a new shared memory seg
------ Shared Memory Segments --------
key shmid owner perms bytes nattch status
0x00000000 6 ubuntu 600 524288 2 dest
0x730333ea 8 ubuntu 666 100 0
SHMID:8Writing data to shared memory...
DONE
Reading data from shared memory...
DATA:-welcome
DONE
Removing shared memory Segment...
Removed Successfully
administrator@administrator-hcl-desktop:~/Desktop/gopikrishna$